

CHAPTER II

REVIEW OF RELATED

LITERATURE

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2.1. INTRODUCTION

Man is the only animal that can take advantage of knowledge which has been preserved or accumulated through the centuries or since the origin of man. Human knowledge has the three phase's preservation, transmission and advancement. This fact is of particular importance in research which operates as a continuous function of ever closer approximation to the truth. Practically knowledge found in libraries. Generation to generation people builds up knowledge accumulated from the past. Knowledge brings progress in all areas of human endeavour.

The investigator can ensure that considerable work have already been done on many of the related topics which are directly related to his proposed investigation. For any specific research project to occupy this place in the development of a discipline, the researcher must be thoroughly familiar with both previous theory and research. To assure this familiarity, every research project in the behavioural sciences, has as one of its early stage, a review of the theoretical and research literature.

In this chapter, the researcher has arranged all relevant literature and studies reviewed under the following scheme.

1. Studies on alcohol related harm, mostly concentrated on college students
2. Studies on the magnitude of the problem or Why Target College Student Drinking?
3. Studies on the tools used for the research work
4. Studies on strategies to prevent alcohol problems among college students
5. Studies on various interventions to curb alcohol misuse

In order to make it more clear an extensive review of literature has been done on the above.

2.2 STUDIES IN INDIA

As per Raghavan **Committee** (April 2009), ragging has increased due to consumption of alcohol in the premises. US is also suffering from these problems as per the several studies. While in India studies are few as compared to US, UK, Canada and other developed countries.

In India minimum age for alcohol consumption/ purchase is quoted from the implications of Alcohol Related Harm research by **Dr. Guru Raj and others** and it is tabulated below is as follows:

State	Age Limit	Act
Andhra Pradesh	21	Andhra Excise Act, 1968
Assam	18	Assam Excise Act, 2010
Bihar	21	Bihar and Orissa Excise Act, 1915
Gujarat	21	Gujarat Excise Act, 1915
Mumbai	21	Bombay Prohibition Act, 1949
Haryana	25	Punjab Excise Act, 1914
Himachal Pradesh	25	Punjab Excise Act, 1914
Karnataka	18	Karnataka Excise Act, 1967
Kerala	18	Abkari Act (year unknown)
Maharashtra	18	Maharashtra Minor Bombay Prohibition Act, 1949
Madhya Pradesh	21	Madhya Pradesh Excise Act, 1915
Punjab	25	Punjab Excise Act, 1914
Rajasthan	18	Rajasthan Excise Act, 1950
Orissa	21	Bihar and Orissa Excise Act, 1915
Tamil Nadu	21	Tamil Nadu Prohibition Act, 1937

Uttar Pradesh	21	Uttar Pradesh Excise Act, 1910
West Bengal	21	Bengal Excise Act, 1909

Researchers in this field say that a person consumes alcohol for a variety of self-proclaimed reasons. An alarming trend over the past decade is the process of normalization of drinking activities in Indian society. In urban areas, drinking usually starts in social circles, progressing later into compulsive individual drinking, while solitary drinking leads to habitual and addictive drinking in rural areas. (**G Gururaj, Murthy Pratima, N Girish& V Benegal 2011**)¹

According to T. T Ranganathan Clinical Research Foundation Chennai 6.3 crores' of people drink in India. From their research we came to know that the growth in scale is steadily increasing from six to eight percent per year. This also shows the drinking increased among people around eighty percent per year, in the form of hard liquor or distilled spirit. This is an alarming rate of increase and it should be prevented at any cost. From this report we also come to know that, major drinks are with high concentration of liquor and the other part is in the form of country liquor. In recent times the age initiation of drinking increased to adolescence. Societal changes and developments of urbanization and other facilities contributed to increase in drinking.

In India production of spirit and its sales makes a large amount of income to the government as taxes. Still some of the states passed laws to prohibit liquor. These states include Gujarat, Manipur, Mizoram and Nagaland. From a collection of reviews it has revealed that thirty Percent of the male population and five percent of female population drink alcohol. In India use of alcohol is higher in deprived communities. In recent years the alcohol use of young people increased and as their age increases their quantity and frequency of **intake has** also increased. This causes mortality rate of young men. Almost 1/3 of injuries and deaths (during night) and 25% admitted to hospitals (stroke, HIV/AIDS, STDs) is because of the alcohol misuse. (**Gururaj G., Rao GN, Bengal V, Murthy P 2006**)²

Indian Alcohol Policy Alliance (IAPA) is a nongovernmental organization, established and registered under the Indian Trust Act in 2004; to prevent alcohol related harm through evidence based

policy intervention, advocacy and capacity building. IAPA is affiliated to the Global Alcohol Policy Alliance (GAPA) and is supported by FORUT - Campaign for Development and Solidarity. According to IAPA - Alcohol use is very high in recent times and the production of alcohol in India increased a new height with almost 65% of the total production. (Ingvar Midthun 2006)³

The consumption is two litres per person a year. However, patterns of consumption vary from place to place. Some of the states have shown very high intake of alcohol (Kerala, Punjab, Andhra Pradesh, Goa and the North-East). Women population in Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Orissa, Madhya Pradesh, Sikkim and North-East has more drinking attitudes than the other states of the country. **Alcohol & Drug Information Centre (ADIC)** has information about the use of alcohol among the young people in India. It says that there is a high speed increase of drinking in last few years. In Kerala previously people used to drink at an average age above 19 years (1986) but in recent years it came down to 14 years of age . In India, comparing to women, men are extremely high in numbers, more than 95% of men drink alcohol and more are from rural, tribal, and low economic urban communities. Whatever they earn are daily spent on drinking. This increases suicides, violence in the families and loss of their jobs because of poor performance. A study conducted by NIMHANS Bangalore, sponsored by WHO showed twenty percent of females are victims of violence. Another study by **Alcohol & Drug Information Centre (ADIC)** – recorded that drinking caused 40% of the road accidents in India. (Edayaranmula J. J 2005)⁴

Health and safety: Heavy drinking is significantly associated with health issues and hospitalizations.

Work place: Alcoholism leads to most of the work place accidents and absenteeism. It is significant to note that in a public enterprise, after alcoholism treatment, accidents from work place reduced and performance of people increased.

Family: Eighty five percent of men who were violent towards their wives were frequent or daily users of alcohol. Most of the abusive incidents occurred in the families were under the influence of alcohol. If the breadwinners (caregiver) become an alcoholic, his children will become unable to get

food or education and this may also lead to severe problems like indebtedness, domestic violence, divorces and hardship. But if the alcoholics go for treatments, definitely these problems can vanish away. **(Alcohol Related Harm in India-A fact sheet 2008)⁵**

Despite clear evidence of the major negative aspects of alcohol, resulting in global burden of disease and substantial economic costs, focus on alcohol control is inadequate and insufficient the world over. Increase in production and marketing in recent years pushed alcohol use to a rise. Many of the countries are lacking in proper polices.. **(Casswell Sally, Thamarangsi Thaksaphon, 2009)⁶**

2.3 STUDIES ON ALCOHOL RELATED HARM, MOSTLY CONCENTRATED ON COLLEGE STUDENTS.

In Indian context, very few studies had been done on college students drinking. Some of the important studies are as follows.

Alcohol in suicide victims: A study from South Delhi by Behera C and others is an example of how dangerous alcohol drinking can become. Eighty cases of suicide were received in the mortuary of All India Institute of Medical Sciences during the period of 2007 to 2008. All the relevant examination was done on all the cases, like blood alcohol concentration, suicide case history, past history of psychiatric reports, and demographic details. Of these, alcohol was found positive in 20% of suicide victims. In comparison to females (5.26%), 33.33% males had consumed alcohol at the time of suicide. Most of the cases belong to the age group of 21 to 40 years; in 25.92% of cases were married victims as compared to only 7.69% in unmarried. **(Behera C Rautji Ravi, Raina Anupuma, Dogra T. D, 2009)⁷**

Sex and alcohol by Vijayanath and others stated alcohol is widely used and accepted as a pleasure giving substance since ancient times. The effects of consumption of alcohol are

manifold. In this paper, an attempt has been made to review the work of various authors to find the effects of alcohol especially in sex related activities. Using alcohol as the excuse for unacceptable sexual behavior and the legal implications of drunken state in sexual assault cases are also discussed. (**Vijayanath V, Tarachand K.C 2009**).⁸

Prevalence & predictors of alcohol use among college students in Ludhiana, by [Vishal Khosla](#), [Thankappan](#), [Mini](#) and [Sarma](#) conducted a study to find the prevalence, pattern and predictors of alcohol consumption among college students reported to be associated with increased risk for alcohol-related problems. ([Vishal Khosla](#), [K.R. Thankappan](#), [G.K. Mini](#), [P.S. Sarma](#), 2008).⁹

Pradeep and others study on Severity of alcoholism in Indian males: Correlation with age of onset and family history of alcoholism examined on the male patients aged between twenty to fifty years, admitted consecutively related to alcohol problems in the medical, surgical, orthopedic, and psychiatric wards in a large teaching general hospital, over a period of 14 months. The patients comes here is from rural and urban population consisted of Bangalore area and other neighboring districts of AP, TN and Kerala. This study concluded that the age of onset of initiation is a better predictor of severity of alcoholism, but many other studies have showed that alcoholism related to family history. The researchers also suggested that if the alcohol use age postponed to 25 years could be explored as a primary prevention strategy in genetically vulnerable adolescents. (**Pradeep et al 2010**).¹⁰

Studies on alcohol and Crime Behaviours by **Vijayanath V**, and **Tarachand K.C** stated that Alcohol use has been associated with High Risk Behaviours (HRB).in young adults, used an Event-analysis technique for the occurrence of high risk behaviours, namely road accidents, violence and crime, self-harm behaviour and risky sexual behaviour. Personality drunken states in sexual assault cases are also discussed in this study (**Vijayanath V, Tarachand K.C 2009**)⁸.

Personality variables were studied using the Sensation Seeking Scale, Analysis of the data found evidence that severity of dependence on personalities of sensation seeking and impulsivity and lower educational status showed significant association with high risk behaviours.(HRB) and confirmed that

majority of the cases were related to road accidents. **(Vijayanath.V, Tarachand.K.C. 2011)**¹¹

A very important and obvious factor in the research work of **Ganaraja and Other** is that Students curiosity to just test or taste may have an important factor for starting alcohol intake and later it may take a turn of abuse. So educators should give importance to train them to be where and how to limit their drinking. **(Ganaraja B, et al 2007)**.¹²

Another study threw light on a relationship of ASPD and alcohol abuse or dependence. It is 21 times more likely to develop alcohol abuse and dependence on people who have ASPD than the people who are not **(National Association for Children of Alcoholics 2001)**.¹³

Moeller and other's work on Antisocial Personality Disorder, Alcohol and Aggression, pointed out the relationship between these three areas. Their results on the epidemiology of violence have consistently linked alcohol intoxication and violence. For example, many research studies included in this study showed a positive correlation which exists between the quantity of alcohol consumed and the frequency of a wide variety of violent acts, such as sexual assault, child abuse, and homicide. Another study quoted in this work is Bushman and Cooper's research work. It reviewed the results of 30 laboratory studies that showed that people who drink alcohol are more likely to be aggressive in nature than who doesn't drink alcohol. Based on those studies, the authors concluded that alcohol does in fact increase aggression in humans. **(Moeller Gerard F, Dougherty M Donald 2001)** ¹⁴

Most of the young people who are the children of alcoholics (adult children of alcoholics-ACOA's) often don't understand their problems actually related to their parents alcoholism. They are not good at establishing relationship with others. They are disturbed always and react aggressively or sometimes too depressed. They may fail to build up their future in an appropriate manner because of their negative self image. They may not have the courage and willingness to shoulder their responsibilities as a family member. They may not trust people because they have not learned that from their parents. Mostly they

are the victims of punishment due to their parents. **(National Association for Children of Alcoholics 1998),**¹⁵

Research studies from National association for children of alcoholics revealed that adult children of alcoholics (ACOAs) are four times more likely to develop alcoholism than children of non-alcoholics. Hereditary factors have a major part in the development of alcoholism. The inability to deal with stress in a healthy way is another contributing factor among adult children of alcoholics. **Joseph A. Califano**, former United States Secretary of Health and Human Services, pointed out some facts that persons from alcoholic family especially the sons sees doctors more than non alcoholics family. Furthermore alcoholic family members have higher rates of psychological or mental disorders such as anxiety, depression, and introversion". It is also seen that adult daughters of alcoholics tend to have more gynecological problems. In addition, they may suffer from eating disorder – bulimia. **(National Association for Children of Alcoholics 1999)**¹⁶

Alcoholism has only negative effects on the spouses of alcoholics. Most of the spouses hates their life as they goes through terrible mental stresses, they avoid most of the social functions because of self pity and sometimes they may go under depression and may suffer exhaustion and become physically or mentally ill. Because of husband drinking the wife has to do the duties of her husband also. The responsibility of the spouse increases, two persons duty to one person and to take care of the alcoholic husband. This may cause neglecting the children. Another major issue is the financial crisis they go through. A study names, "Exposure to Alcoholism in the Family" showed that the reasons of early widowhood and the main cause of divorce. **(Noll, R.B., Zucker, R.A., and Greenberg, G.S. 1990),**¹⁷

Researchers in this field have an opinion that family and marital problems often start because of alcoholism, some families the spouses and children may also be with the side of the alcoholic making it worse. Families tend to keep their relationships among them inside the family rather than spreading it out to the neighbors or their relatives, fearing that they may lose their image in the circle. This way of family member's attitudes may allow the persons to continue the harmful drinking instead of trying to solve it. Family members believe that they are

bound to keep this within themselves. This in turn negatively affects the family members and later stages they all go through multiple problems in the family. **(Smith, Jacqueline J.; Graden, Janet L Phelps, LeAdelle 1998)¹⁸**

One of the studies by NIAAA on 2000 concentrated on the family issues due to alcoholism. Most of the family members of alcoholics go through lot and lots of pain. They may take the alcoholic to hospital for treatment process. At first the alcoholics stop drinking and start living normal and make the codependents to believe that he completely stopped drinking. Some other family members do everything for the alcoholic members to hide the problem to secure their family image. **(National Institute on Alcohol Abuse and Alcoholism, 2000)¹⁹**

According to **Widom** in her 1993 research estimates, every year at least 1 million children in the United States experience some form of abuse or neglect. Many of the child abuse are associated with alcohol use and abuse, either as a consequence or as a causative factor. For example, parental alcohol abuse may contribute to the abusive treatment of children. Furthermore, people who have been abused as children are at the highest risk for developing alcohol abuse as adults. Another study by her in 1989, explained about child abuse that manifests in various forms, it can be physical or sexual or emotional etc.

Sexual abuse also can encompass a variety of abusive behaviors, ranging from fondling or touching to sodomy, incest, or rape. Neglect the child or children is often happens in the family when parents are alcoholics. This kind of abuse is difficult to define and identifies with factors such as inability to cope with stress and aggressive behavior. Findings from this study help to mediate the associations between the childhood problems and adult drinking. **(Widom S.C et al 2001)²⁰**

According to **Brown and others2000**, cognitive impairments can be witnessed among adolescent alcohol abusers, weeks after they stopped drinking. With the onset of adolescence, if they are under heavy drinking it can lead to some kind of shrinking in the area of hippocampus in the brain

.NIAAA materials on Alcohol and Adolescent Brain Development research suggest that adolescents are less sensitive than adults to the effects of alcohol. The findings reveal that adolescents might be able to stay awake and move even with higher blood alcohol levels than adults with an equivalent history of alcohol exposure. At the same time, they are exposed to cognitive impairments and injury to the brain due to heavy drinking. **(Brown, S.A., Tapert, S.F., Granholm, E, and Delis, D.C. 2000)**²¹

Engels et al. 2009 study expressed that one of the main reason for drinking is alcohol drinking portrayal on television. The way it is shown in television affects the actual drinking behaviour of the young adult viewers. They never have an idea that alcohol drinking becomes a habit and within no time they will be dependant on drinking. **(Engels et al. 2009)**²²

According to Grant, alcoholism tends to run in families. Children of alcoholics (COAs) are four times more likely to develop alcoholism or drug problems than those of non-COAs. It is certainly a great concern about children of alcoholics. **(Grant B.F. 2000)**.²³ According to SAMHSA's (Substance Abuse & Mental Health Services Administration) National Clearinghouse for Alcohol and Drug Information, 76 million adults in America are exposed to alcoholism in the family. It also revealed that one of the main reason for divorce, physical violence and sexual assault. **(Tetyana Parsons 2003)**²⁴

Alcoholics are different in nature. Their symptoms and diseases depend on their original conditions and the nature of their drinking. There are a wide range of factors involved in the effects of drinking alcohol. These factors makes a person vulnerable to addiction.. **(U.S. Department of Health and Human Services. 1997)**.²⁵

In research work it is very necessary to apply appropriate instruments which can get all the information related to that particular work. In neuroscience there are various kinds' scales to assess the mental statuses to observe the brain functions. When techniques are combined, it will be possible to find out from the brain regions and behaviors that which parts are most affected by alcohol use and abuse. **(Oscar-Berman Marlene MarinkovicKsenija 2003)**.²⁶

The children of alcoholics (COAs) sometimes believe that they are responsible for what's happening in their family so they tend to take the blame on themselves. They remain aloof and so may not mingle with others and may not attend school or colleges.

The people around them may not treat them well outside may also cause depression among these children. They also feel ashamed of themselves and show poor self image. They try to stay away from others and may follow their parent's alcoholic path, if they are not given proper guidance and support.

They are not appropriate and consistent roles for all family members. Another important mile stone is the establishment of National Association for Children of Alcoholics to eliminate the adverse impact of alcohol and drug use on children and families. **(National Institute on Alcohol Abuse and Alcoholism 2000).**²⁷

Harmful and hazardous alcohol use lead to youth violence. Different forms of violence include gang fights in streets, bars and nightclubs that are common in cities. The young people when they fight especially after heavy drinking they are out of control and anything can happen at that time. Alexander and coworkers study survey revealed that, across the world, an average of 565 young people aged 10 to 29 die every day because of heavy drinking and get into various forms of violence, with the males having more of risk behavior at this young age. Youth violence always damages the peace and harmony of all sectors of the people around. To remove the harmful effects of alcohol from young people should thus be considered a priority for policy makers. Alcohol use that damages the health of a person is called as harmful use. Alcohol use that increases the risk of dangerous consequences is called the hazardous use of alcohol. **(Butchart Alexander 2006)**²⁸

Brian M. Quigley and Kenneth E. Leonard' study throw light into the present study about alcohol use and violence. In this article they discussed about the serious issues of alcohol drinking nature of the young adults. In early adulthood they are tempted to get into alcohol drinking. There are various

reasons already discussed in the previous pages. Very rarely they drink moderate and take care of their health. Mostly they drink uncontrollably and get in to fights. Heavy drinking always witnessed violence in young adults. These kinds of violence more occurred in bars and clubs. The situations that provoke intoxicated aggression from personality differences among young adults to characteristics of the circumstances. Some People have the character of getting angry often, impulsive in nature, and less agreeable seem more likely to engage in intoxicated aggression. Permitted places to drink increase the probability of intoxicated aggression and heavy drinking, makes situations for violence and injury. In instances of violence in the family, mostly reflected by the alcohol use of the husband is predictive of deadly violence especially in marriages already high in conflict. Many of the findings from this study are consistent with the hypothesis that intoxication out come make conflict situations worse. **(Quigley M Brian, Leonard E Kenneth (2004/2005).²⁹**

Another study also discusses about heavy drinking and how that cause behavior changes in people. There is a close relationship between intoxication and conflicts Research findings pointed out that mostly conflicts between people arise because of people's intoxication nature. The alcohol intoxication contributes to violence. Intoxicated aggression needs more understanding about alcohol effects on people. To prevent it needs effective approaches to deal with violent behaviour in young adults. **(Cherpitel, C.J. 1993).³⁰**

Another study by Abbey and colleagues discussed about the devastating crises (Sexual assault) faced by adolescent and adult women. They called it as "a silent epidemic". It is there in every community in all over the world still it is not given much seriousness in concern. Cases of sexual assault occurs often at high rates but is rarely reported to the authorities. Many of the victims never open their mouth with fear that they will be derogated. This, according to research findings, is a valid concern. A woman said that for many years she was thinking that it was not wrong for being too drunk. I never called it 'rape' until much more recently, even though I repeatedly told him 'no'." This article gives a summary about the misuse of drinking alcohol among males and its effects on innocents around them. Future researches can do a lot on this devastating issue of innocent victims. The researchers on the opinion that, one half of the sexual assaults being accounted by men who are alcoholic. **(Abbey Antonia, Zawacki Tina, Buck O Philip, Clinton Monique, McAuslan Pam 2001).³¹**

The two important personality variables considered in this study were Sensation Seeking and Impulsivity. The study results showed that these two have significant association with alcohol use. Lindsay's and colleague's work was to study the main psychosocial reasons that predict college drinking. They examined variables like demographic details, personality type, history of drinking, alcohol expectancies, motives for drinking, stress and coping, activity involvement, and peer and family influence. From this review study, one important point noticed by the researcher is the demographic factor gender, which has been seen in many other studies of alcohol related problems. More than 75% of the population from the college students, especially male students drinks more often and more in quantities, it's a proven fact. **(Ham S Lindsay., Hope A Debra 2003)**³²

Hunt, Laidler (2001), "Alcohol and Violence in the Lives of Gang Members" to understand the role of alcohol in the lives of gang members, first thing they explained about the characteristics and dynamics of street life. About Partying, hangings around etc are important part of the study. Alcohol and Violence in the Lives of Gang Members, a study which is quite differently investigated by Geoffrey P. Hunt and Karen Joe Laidler throw light on violence and its relationship with alcohol in young youths and how they form a gang, Mostly people neglect the importance of drinking in gang life but drinking is common and alcohol is the medium of socializing within the gang life. Alcohol drinking works as an important ingredient to social cohesion in gang life. But there are internal fights arises at times between members for respectful positions in gang itself and Jealousies etc. **(Hunt, Laidler, 2001)**.³³

There are many studies on chronic alcohol consumption as a significant risk factor for cancer and other liver and kidney mal functions. **Poschl and Seitz** also did a study that revealed chronic drinking of alcohol leads to upper alimentary tract cancer including liver cancer. They collected the epidemiological data to identify that alcohol consumption is a significant risk factor. The increased risk attributable to alcohol consumption is of cancer in the large intestine and in the breast. The epidemiological data on alcohol and other organ cancers is controversial and there is at present not enough evidence for a significant association. But alcohol consumption is a risk factor definite from many clinical studies **(Poschl G. and Seitz H. K. 2004)**.³⁴

According to studies by “Nayak and others” heavy drinking of partner may increase the risk of mental disorders 2 to 3 fold. Violence is always related to excessive alcohol use of the partner. In an alcoholic’s family husband wife and children, all share the problems. If they are not willing to get treated it may go out of control and gradually anybody become the victim of mental disorders. (**Nayak et al 2010**).³⁵

“Binge drinking” or “Binge drinkers”

Another study explores comprehensive personality factors that are associated with the co-occurrence of binge eating and binge drinking among a diverse sample of 208 college undergraduates also given insight into the present study (**Rush C Christina et al 2009**).³⁶

Harvard School of Public Health conducted a College Alcohol Study a self-administered survey on environmental correlates of underage alcohol use and related problems among students. This study examined the frequency and quantity of drinking among students, alcohol related problems among students and what are the reasons related to binge drinking (**Wechsler H et al, 2000**).³⁷

According to **Helmkamp** , during the 1990s binge drinking was a serious concern; almost half of the populations in colleges (41% to 47%) were binge drinkers. The survey done by these researchers revealed that five or more drinks in one sitting (binge drinking) happened among students within two weeks. The highest numbers belong to the college athletes. (**Helmkamp et al 2003**).³⁸

Another study examined the binge drinking on colleges during 1990s also showed the results of binge drinking remained constant during this period. Prevention programs on alcohol related problems didn’t prove that successful and college authorities started new strategies and policies to reduce binge drinking in college campuses. (**Wechsler Henry, Lee, Kuo, Lee Hang 1999**).³⁹

College authorities face serious problems related to binge drinking. Heavy alcohol consumption in one occasion leads to high level of alcohol content in blood. More than five drinks per sitting for men and more than four drinks per sitting for women may increase the blood alcohol concentration levels to 0.08g/dl within two hours time. Hazardous drinking like this is a risk to life. **(College Drinking 2012)**⁴⁰

Standard drink is defined for people to understand how much they can drink under the law of the country. Each country is defined age limit also for drinking alcohol. A standard drink is calculated as any drink that contains 14 grams of pure alcohol. One ounce of alcohol is 28.431ml. The reason behind to define alcohol intake is to control the alcohol consumption and protect the people from alcohol harm.

Some of the organizations from alcohol industry and a few alcohol educators questioned about the five drinks or more for men and four drinks or more for women as levels of risk drinking. Knight and colleagues study showed that their findings on college alcohol study, 1 out of every 20 who drinks alcohol are dependent on alcohol use. It also revealed that male students are more risk drinkers than female drinkers. **(Knight, et al 2002).**⁴¹

Wechsler and others had detailed study about binge drinking and college students. Their main objectives were to examine the extent of binge drinking by college students and the ensuing health and behavioral problems that binge drinkers create for themselves and others on their campus. Binge drinkers create problems for classmates who are not binge drinking. Many students are not binge drinkers at school levels with higher binge rates in college levels, were more likely to experience problems than students at schools with lower binge rates **(Wechsler H. et al 1994).**⁴²

A study by Wechsler et al in 2000 explained about the hazardous drinking of college students (5

or more drinking in a single sitting) in the years of 1993, 97 and 99. The survey revealed that 23% of students including female students consumed alcohol 3 or more times in a week. About half of the population from 14,138 students randomly selected from colleges and universities reported that they consumed alcohol at least one heavy drinking in the year prior to the survey. **(Wechsler et al., 2000).**⁴³

Heavy drinking students experienced five or more different drinking related problems, including accidents, and unplanned sex. Many of the binge drinkers think that they are not belong to the problem drinkers and have not sought treatment for an alcohol problem. Binge drinkers are one way or the other found to be nuisance for other students who are not binge drinkers. **(Wechsler, H.; Lee, J.E.; Kuo, M.; et al. (2002).**⁴⁴

The magnitude of the drinking problem is very high and it needs to be addressed in a proper manner. Every college and university is exercised by policies that should include disciplinary measures to curb this menace also for the wellbeing of the students. **(Saltz .R F 2004).**⁴⁵

Alcohol and College Students Drinking Fact Sheet

NIAAA reports quoted that eighty percent of the college students reported in the survey that the past year they had at least drank once and 72% students reported that at least once in a month they drank alcohol. 82% of the students were under the age of 21 reported that they used alcohol in the past year and 69% of the students under the age of 21 reported that they used alcohol at least once in 30 days. But on average they reported that in one sitting they didn't drink more than 6 drinks at all.

According to **the Harvard School of Public Health College Alcohol Study (CAS)**, male students showed binge drinking behavior. It also stated that if the students started binge drinking in high school itself then they are more prone to binge drink in college also. **(Alcohol and College Students Drinking Fact Sheet 2003)**⁴⁶

Many of the students have an attitude towards drinking as to get drunk. **(College drinking prevention strategies, 2002).**⁴⁷Forty-five percent of 'college freshmen' report they engaged in binge drinking at least once during the two weeks prior to completing the study. Fully one-third of freshmen students' report their alcohol use has increased within the past 12 months. Freshmen students who began drinking and/or reported being drunk before 16 years of age were more likely than other freshmen to binge drink in college. **(National Institute on Alcohol Abuse and Alcoholism 1996)**⁴⁸

2.4. STUDIES ON THE MAGNITUDE OF THE PROBLEM

In 2001/2002, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) conducted the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), the largest and most ambitious co morbidity study ever conducted. This study brings an overall summary of different ways to put things together and use a multiple prevention methods to control alcohol harm among students. **(Grant F. Bridget and Dawson A. Deborah 2006)**⁴⁹

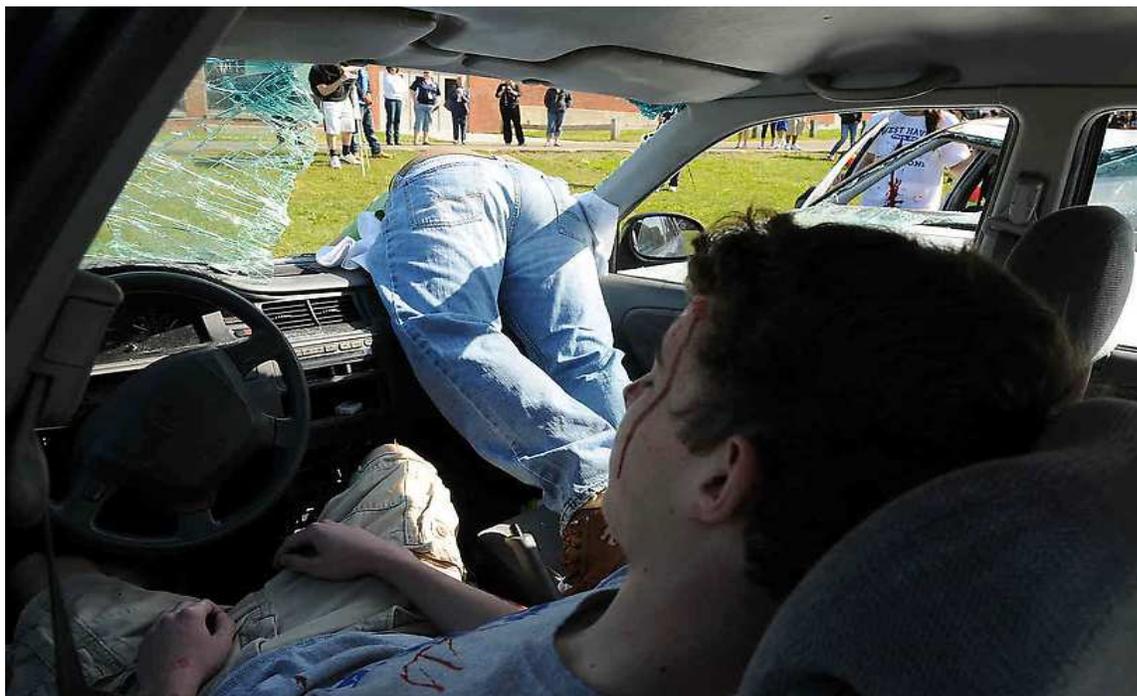
There are many studies done by many researchers on United States college students (18-24) about their drinking and alcohol related problems. Two of the study results showed that among the college students aged between 18 and 24, alcohol-related unintentional injury deaths increased 3% per 100,000 from 1,440 in 1998 to 1,825 in 2005. **(Hingson, R.W.; Zha, W.; and Weitzman, E.R. 2009,**⁵⁰**Ralph et al 2009)**⁵¹

Hundred of college students die every year from alcohol drinking



A large number of students die as a result of alcohol-related causes such as traffic accidents, injuries, fall, fights, and acute alcohol poisoning every year in cosmopolitan cities in India.

The National Institute of Alcohol Abuse and Alcoholism (NIAAA 2005)⁵² estimated that one out of ten people have a drinking problem and one out of twenty is an alcoholic. **Reports from NIAAA (Alcohol Alert, 2004/2005),⁵³**



Hingson study revealed the estimates of unintentional deaths, unintentional injuries, assaults, sexual abuse, victims of sexual assault, unsafe sex, academic problems, and drunk driving in the time frame of **1998 – 2002 (Hingson et al.2005)**⁵⁴ Another study finding showed that drinking can lead to cognitive impairments, (**White Raskin Helene, Jackson Kristina 2004/2005**)⁵⁵

The environmental conditions such as peer influence and the availability of liquor are the contributing factors for harmful drinking of students. **O'Malley and Johnston (2002)**⁵⁶ explained in their studies that whatever the cause college or school drinking need special attention.



(**BaborF. Thomas and Higgins-Biddle C. John 2001**)⁵⁷

Robert F. Saltz said in one of the studies that college administrators needed to be strengthened to deal with students drinking problems. (**Saltz.RF2004**)⁴⁶

The **National Institute on Alcohol Abuse and Alcoholism (NIAAA)** Task Force continuously reviews papers on different issues faced by students drinking and evaluate

prevention strategies time to time and follow a pattern to curb this problem. They also found that individual interventions are more appropriate than group interventions. (**A Call to Action 2002**).⁵⁸

NIAAA group adopted various types of treatment strategies such as including self help groups for helping alcoholic and his families. Alcohol Anonymous is a group to help people who are addicts. Family therapy, is a professional group in the field to help alcoholics and their families to adopt better living conditions. (**National Institute on Alcohol Abuse and Alcoholism 2004/2005**)⁵⁹

Al-Anon and Al Ateen are the two groups working only for the families of alcoholics. Al Anon helps the wives of the alcoholics and Al Ateen helps the children of the alcoholics. (**WHO Global InfoBase 2006**)⁶⁰

In 1998, NIAAA started a review committee to review the literatures on students drinking. After the evaluation their findings showed that harmful drinking is high. The college students drinking should be monitored and suitable programs should be framed to stop harmful effects of alcohol. (**National Institute on Drug Abuse and the National Institute on Alcohol Abuse and Alcoholism 1998**)⁶¹

Alcohol Disorders among College Students: Research results from **U.S National institute of health in 2002** shows that students are at risk of alcohol related harm. They are not aware of or mature enough to put things into their head and stay away from alcohol misuse. They often drink uncontrollable and get in to serious life threatening situations. (**National Institute on Alcohol Abuse and Alcoholism 2002**)⁶²

According to Knight despite the prevalence of true alcohol disorders on college campuses, few students report, (Few Seek Treatment) seeking treatment. Only six percent of students with alcohol dependence reported that they had sought treatment. "For years colleges have offered alcohol education programs. However, their findings show that colleges must not only strengthen prevention programs, but also provide more attention to high risk drinkers early on and ensure the availability of treatment," Another important thing is to take necessary action

on the easy availability of liquor, to the students. It should be stopped to the students. Wechsler said. **(Knight, et al 2002)**⁴²

Wechsler and his colleagues have done many research studies on alcohol problems among college students. They said college authorities have recognized the problems and they are implementing it. But drinking is not reduced among college students. The policies and programs should be aimed at reducing the harm among students. These researchers have framed some new helpful strategies to help the students. **(Wechsler, Lee, Nelson and Kuo 2002)**⁶³

Another study explained that the injuries and deaths due to alcohol drinking among students aged 18 to 24 in the years of 1998 to 2005 was 3% higher than the previous years in the US. It shows an urgent need for adaptation of new scientific ways to solve this problem. **(Ralph et al 2009)**⁵²

The Harvard School of Public Health College Alcohol Study (CAS), continuously studied about alcohol problems and college students for 4 years, from 1993 to 1997. They looked into every angle and explained about the effects of alcoholism in colleges. This study provided a better intervention plans for many of the professionals in this field. **(Wechsler Henry 2001)**.⁶⁴

Another study explores comprehensive personality factors that are associated with the co-occurrence of binge eating and binge drinking among a diverse sample of 208 college undergraduates, the findings showed that the binge eat and drink students have high levels of neuroticism than the non bingers. **(Christina C Rush, Sara J Becker, John F Curry, 2009)**⁶⁵

Perkins study provides some insight into misconceptions of peer norms about consumptions of alcohol. These misconceptions regarding drinking should be corrected through appropriate interventions. Another important point noticed from this article is that there are interventions to help the students to understand these problems. **(Perkins Wesley H. 2002)**⁶⁶

Larimer and Cronce (2002)⁶⁷ explained in their study that the interventions should concentrate on alcohol information and its effects on individual. After the session there should be a feedback to see how far the sessions are effective.

According to college drinking prevention strategies (2002)⁴⁸ alcoholism reduces life expectancy by 10 - 12 years. Next to smoking, scientific research results indicated that adult drinking not increasing more than one drink per day may lower the mortality rate than non drinking adults. But if the alcohol drinking adults increases (more than 2 or 3 or 4 drinks per day) the quantity in consumption, then the situations will change and mortality rate will go up, means more alcohol more damages and deaths. It is the most common preventable cause of death in America. If a person start drinking in his early age greater possibility of developing serious illness on later life. **(National Institute on Alcohol Abuse and Alcoholism 1999)**⁶⁸

According to the 2001 **Harvard School of Public Health College Alcohol Study (CAS)** reports the percentage of drinking and driving among college students is 3 out of 10. Most of the students belong to binge drinking. The results indicated that 58% students are frequent binge drinkers, 40% of students are occasional binge drinkers and 19% students are non binge drinkers. **(Wechsler, H.; Lee, J.E.; Kuo, M.; et al. 2002)**.⁶⁹ **According to the National Highway Traffic Safety Administration (NHTSA)**,. Alcohol-related traffic fatality rates are almost twice as for 18, 19 and 20-year olds as for the population over 21. Reports revealed that a young person dies in an alcohol-related traffic crash an average of once every 3 hours.

The **Harvard College Alcohol Survey**, The researchers calculated alcohol-related unintentional injury deaths and other health problems among college students ages 18 to 24 in 1998 and 2001. This study shows that injury and deaths due to drinking was increased 6% per college, driving under the influence of alcohol, increased from 26% to 31% during this time period. These studies stressed on

implementing some of the core areas were, greater enforcement of the legal drinking age of 21 and zero tolerance laws, increases in alcohol taxes, and wider implementation of screening and counseling programs and comprehensive community interventions can reduce college drinking and associated harm to students and others. (**Alcohol and College Students Drinking Fact Sheet Harvard's College Alcohol Study, Journal of Adolescent Health, 2003**⁴⁷,**National Highway Traffic Safety Administration 1994**)⁷⁰

An excellent study shows there are prevention strategies which can reduce in alcohol intake among college students. This article which clearly explains about magnitude of alcohol-related mortality and morbidity among college students aged 18-24: from 1998 to 2001. It shows that if a team of professionals from law, health and education work together for the safety of the college students then it is possible that a good number of students follow the legal limits. (**National Highway Traffic Safety Administration 1997**)⁷¹

2.5 STUDIES ON THE TOOLS USED FOR THE RESEARCH WORK

Some of the studies motivated the researcher to use the DMQR & AUDIT scales because the researcher's aim was to eliminate alcohol misuse. According to **Nemeth** drinking motives appear to be an interesting concept for targeting prevention programs for at-risk adolescents. They argue that prevention programs to reduce heavy drinking might be effective if they aim to change maladaptive drinking motives related to risky drinking. Mainly coping and enhancement motives can be considered as maladaptive drinking motives. **Nemeth's empirical** research confirms the high-risk of coping and enhancement motives because in all studies these two motives were predictive of heavy drinking and of alcohol-related problems. (**Nemeth Zsofia 2011**).⁷²

The psychometric properties of the Modified Drinking Motives Questionnaire--Revised (Modified DMQ-R) is a 5 factor model instrument of drinking motives were evaluated in undergraduate students supported the present research study to carry out.

Based on this five-factor model of drinking motives scale, the scores showed good to excellent on undergraduate who are frequent drinkers. This study shows that this instrument is reliable to use in college population.

Coping-anxiety and coping-depression motives predict different daily mood-drinking relationships by Valerie and her colleagues findings showed that individuals with different drinking motives show distinctive patterns of alcohol use and problems.

When it come to drinking to cope with their problems then it is dangerous to health. **(Grant Valerie et al (2009)⁷³**

The literature on drinking motives suggests that individuals drink for three distinct reasons: Coping motives- to cope with negative emotions, Social motives- to be one among others and Enhancement motives- to facilitate positive feelings. **(Cooper, Russell, Skinner and Windle 1992)⁷⁴** developed a 3-dimensional self-report instrument, the Drinking Motives Questionnaire (DMQ), with subscales designed to assess relative frequency of drinking for each of these three motives. This study also developed to examine the psychometric properties of the DMQ for young adults. The study results replicate and extend previous findings by Cooper and colleagues to a sample of university students, and support the utility of using the DMQ in future investigations of the drinking motives of young adults. **(Stewart S H et al 1996)⁷⁵**

Development and Validation of the Drinking Motive Questionnaire Revised (DMQ-R SF) by Kuntsche is a short form of Cooper 1994 DMQ-R, also showed good reliability on adolescent population. The sample selected from a national representative students belong to the age 12 to 18. The results confirmed the four-dimensional factor structure of the DMQ-R short form both in general and among subpopulations, these results support the potential use of the DMQ-R SF in a wide range of international studies that measure drinking motives. **(Kuntsche Emmanuel et al, 2009)⁷⁶**

Researchers predict various drinking motives are the reasons for alcohol drinking and its related problems in college students. Another study evaluated the relationship between drinking motives and alcohol-related problems. Sample was undergraduates, who completed a battery of self-report questionnaires as part of a course requirement. The result of the study revealed that 61 percent of the students reported that the daily quantity they drink is completely depends up on the severity of the negative reinforcement reasons happened on that day. On the other hand positive reinforcement reasons also resulted in some cases why they increased the quantity in drinking. Means when they drink in social gatherings sometimes they drink to get high. The study concluded motives operate both indirectly through heavy drinking and directly to account for drinking problems. Results support the utility of motivational models of alcohol use in understanding alcohol-related problems in college students. **(Carey K B, C J Correia. 1997)**⁷⁷

Another study examines the drinking related to coping, social and academic goal expectations, measuring the college students drinking related to family of origin, social maladjustments and quantity/frequency of alcohol consumption among college students. The investigation revealed that there is a positive association with emotion focused coping rather than problem focused coping with quantity/frequency of alcohol use. **(Karwacki S B, Bradley J R 1996)**⁷⁸

Read and colleagues in their study, examined the Role of Drinking Motives in College Student Alcohol Use and Problems, They replicated Cooper et al's (1995) study in three ways. Firstly they claimed that they used the instrument on new population college students. Secondly they incorporated social factors an additional motive in relevance with college drinking. Thirdly the psychosocial factors and its influence on drinking motives, alcohol use and problems to find out suitable proposals to reduce alcohol related problems. This article throw light to future researchers to create better prevention strategies to reduce college students alcohol related problems.. **(Read et al. 2003)**⁷⁹

Bradizza and Alan explained about the relationship between drinking motives and adolescent alcohol misuse. Their view is that, adolescent prone to drink under social motives than coping motives

especially during late adolescence. But they also agree that there is limited evidence that there is a significant relationship with adolescence alcohol misuse and coping motives. Research examining the development of motives and the mechanisms by which they influence drinking behavior is needed. **(Bradizza M Clara, Reifman, Alan, Barnes M Grace 1999).**⁸⁰ The present study also influenced by their suggestions because it is very important to know about the mechanisms by which drinking behavior developed in college students to give better education to deal with it.

To assess the prevalence of potential alcohol use disorders and associated factors **Sassi-Mendosa and Beria** used AUDIT. The AUDIT detected a high prevalence of potential alcohol use disorders in the population sampled from their study. **(Sassi-Mendosa, Beria 2003)**⁸¹

Heather and his co-workers used the AUDIT for their study on under graduate students, the most influential study which helped the researcher to choose AUDIT for the study. The study revealed that most of the undergraduates misused alcohol. 3/5 of the students came under the category of alcohol risk on the AUDIT scale. 41% of the students came under the hazardous drinking, 11% came under harmful drinking and 10% under the category of alcohol dependent. In many studies AUDIT is used and showed good sensitivity and specificity. **(Heather et al. 2011)**⁸²

Kokotailo and others in 2004 published their research on graduate and under graduate students from a university, suggested that AUDIT is a valid instrument for alcohol screening in the college health population. **(Kokotailo et al 2004).**⁸³

For identifying alcohol misuse and to work out a proper intervention according to the individual needs, AUDIT is used in many settings. **(Babor and Higgins-Biddle, 2001)**⁸⁴:

A study by Clements in 1998⁸⁵ showed that the AUDIT was the best instrument in collecting information about alcohol abuse than any other instrument in recent times. The study concluded that

for early interventions this scale can be helpful for college students.

2.6 STUDIES ON STRATEGIES TO PREVENT ALCOHOL PROBLEMS AMONG COLLEGE STUDENTS

The harm reduction alternative Medical Center dedicated to the people to provide treatment and alcohol drug problems.

Biological, psychological and social abuse is the outcome of alcoholism. The student's intentions for drinking are different and also the frequency and quantity they drink also related to these intentions.

There are many treatment centers for alcoholism. Sometimes harm reduction based therapies help the people to reduce their drinking and take care of their wellbeing. But many a time people approach the last stage like when they seriously affected with illness then they need to be hospitalized for medical treatments. (<http://www.harmreductiontherapy.org/>)⁸⁶

Adoption of pharmacotherapy and adoption of behavior therapy in alcoholism treatment process being explained by Dennis and others in "Charting a Path between Research and Practice in Alcoholism Treatment" have a good impact on the present study because it shows an approach how to deal with alcoholism and the same time it is applicable to the whole population in the world. **(McCarty Dennis, Edmundson Eldon, Hartnett Tim 2006)**⁸⁷

Westermeyer Joe, (2008), ⁸⁸ in his editorial writing in AJP expressed a sea change in the treatment of alcoholism. What has occurred over the last few decades in Native American communities

to permit such a dramatic change? One factor lies in leadership: many tribal leaders have identified substance abuse as a major social and health problem.

Gilder and others 2008 in Indian communities, there is a change in alcohol use because of a critical political change and many American Indian professionals and researchers have devoted their efforts to eliminating substance abuse from American Indian lives and communities. In their study, only 36% of people with alcohol dependence received specific treatment for alcohol related problems. But still today, there are interventions which are preventing many people from alcoholism. The alcoholism care treatments are well equipped and the outcome of it is satisfactory. Many people in the United States achieve remission because of the support extended by the alcoholism care centers. (**Gilder, Lau, Corey et al. 2008**)⁸⁹

Weitzman and Toben has collected data (49163) from College Alcohol Study, Harvard school of public health for studying about the consumption pattern and its long time harm (binge drinking) to create some prevention strategies in colleges. These researchers categorized the drinking patterns among students into low drinkers, medium drinkers and heavy drinkers. The study discussed about the different ways of handling these alcohol related problems. Reading this study also helped the researcher to provide many points to the present study. (**Weitzman R Elissa, Nelson F Toben 2004**)⁹⁰

Future Research and Applications

In developed countries there are quite a few prevention strategies identified to deal with alcohol related problems among college students. But in India it is not the case and it needs more attention to college students and their drinking problems. NIAAA have many alcohol prevention policies to reduce drinking, but there are problems. More research work in this area can make a big difference to implement additional successful interventions to handle students harmful drinking. (**Focus onYoung Adult Drinking 2004/2005**)⁹¹

Social and Psychological Influences on Emerging Adult Drinking Behavior research study **by Helene and Kristina** also helped to understand adult drinking in social and psychological context. Students at this age are prone to drinking. It may be their high risk behavior patterns or the environmental factors, motivates them to alcohol use. Helene and colleagues suggested that if the intervention starts when students enter colleges, then this kind of harm can be avoided among students. **(White Raskin Helene, Jackson Kristina 2005)** ⁹²

Environmental Influences on Young Adult Drinking, This research study expresses about Alcohol Control Policies for underage youth helped to limit alcohol use and harm. The establishment of minimum legal age limit at 21 for drinking (MLDA) is minimized the 18 to 20 year old youths drinking and reduced the accidents and other alcohol related problems of this age group of youths. (Wagenaar C. Alexander. et al 2004/2005)⁹³

2.7 STUDIES ON VARIOUS INTERVENTIONS TO CURB ALCOHOL MISUSE.

Schroeder M. Christine and Prentice A. Deborah 1998⁹⁴ carried out a study on exposing pluralistic ignorance to reduce alcohol use among college students, was very much similar to the present study. They also carried out an education through discussions of peers with supervision to reduce drinking among undergraduate students and it proved that education can reduce drinking among students. This study influenced a great deal of thought for the present study

The Task Force's findings regarding the efficacy of individual-level prevention approaches is being studied by **Larimer and Cronce (2002)**⁹⁵. They have tried to find out which approach is most suitable for the students like educational program, motivational interventions or cognitive behaviour techniques etc. According to the findings each prevention approaches should be suitably arranged to the needs of each student. They also mentioned about combining new methods and other components mixed with the training which may prove more helpful for the students, because each student pattern of drinking is different, so specificity in approaches may be found more successful. **(Longabaugh Richard**

and Morgenstern Jon 1999)⁹⁶

Larimer concluded that the best interventions are those which can provide an understanding about drinking habits and what are the proper individual based approaches such as training in drinking skills and life skills, self-monitoring, and challenges to students' expectancies. **(Larimer et al 2002)**⁹⁷

Monti and others study helped the researcher about knowing young adults in both groups (college students or non college students) rarely identify themselves as problem drinkers, which suggest that proactive screening approaches may be advised. Several screening methods recently have proven effective and deserve further research attention. Despite the promise of BMIs, further research is needed to determine precisely how these interventions facilitate behavior change. **(Monti M Peter Tevyaw , Tracy O'Leary., and Borsari Brian 2004/2005)**⁹⁸

A study aimed at investigating about the effects of 90 minutes health education on alcohol related problems among Japanese college students revealed that it was very effective. **(Masayo Geshiet al, (2007).**⁹⁹

Thadani and others did a study on group motivational interviewing intervention, They claimed that this type of intervention reduces drinking and its related problems among college students. They also said that it is very effective, even a single-session group motivational enhancement intervention with college students also helped students to reduce alcohol use. The program included assessments on time to time, reeducation on social norms, appropriate time frame for behavior changes, relapse prevention and building goals to protect the health from alcohol menace. **(Thadani, Vandana; Huchting, Karen; LaBrie, Joseph 2009).**¹⁰⁰

There are many ways used to control or prevents alcohol related problems by many researchers in recent times. Some of the important studies that are given lots of information and knowledge to the

present study are as follows.

Identification, Prevention and Treatment: A Review of Individual-Focused Strategies to Reduce Problematic Alcohol Consumption by College Students. This study evaluates the overall efficacy of an approach by measuring behavioral outcomes such as reductions in alcohol use and associated negative consequences were included.

The study suggests that students will be best served by implementing them with brief, goal oriented skill based program to reduce their drinking habits. Campuses having a health care center also very suitable for high risk drinking students. Individual focused intervention will be appropriate according to **Larimer and Cronce 2002.**¹⁰¹

A study on college students (N=108; 56% female, 44% male) who drinks alcohol. Their intervention was to find out whether alcohol related or alcohol free activity which one makes the students participation enjoyment. Overall, students found alcohol-related activities more enjoyable than alcohol-free activities. However they enjoyed alcohol-free activities such as movies, going to the museums, going to parties, hanging out with friends, eating at restaurants, and engaging in creative activity were generally as enjoyable as drinking. **(Murphy et al, 2006)**¹⁰²

McBride Nyanda and others did a prolonged study of the harm reduction drug education program. What they said is that the harm reduction drug education had a significant effect on reducing harm among students. **(McBride Nyanda et al., 2004)**¹⁰³

Borsari and Others, research work clearly indicated that the brief motivational interventions are effective in reducing heavy episodic drinking. In colleges, they are assigned with alcohol use prevention programs where they have conducted brief motivational intervention and alcohol education session, after 3 to 6 months assessments, students reports were more positive to Brief motivational intervention than alcohol education. Researchers of this study also wrote that in this particular area, work is limited and it needs more encouragement. **(Borsari, Brian et al 2005)**¹⁰⁴

A Randomized Clinical Trial Evaluating a Combined Alcohol Intervention for High-Risk College Students by **Rob Turrisi and Others** explained about a trial on alcohol prevention. They wanted to check the efficacy of a parent handbook intervention and a brief screening of alcohol and interventions for college students. They tried each one intervention alone and both together to find out which one works better on reducing alcohol harm. The results showed that when they used both the interventions the drinking significantly reduced. **(Turrisi Rob et al, 2009)**¹⁰⁵

Fleming and others conducted study on college students also helped the present study. Their manual on brief intervention included 24 intervention methods that explained how to change the drinking behavior among people who abuse alcohol.

(Fleming Michael et al. 2010)¹⁰⁶

There is a study conducted to check which ways of interventions are more appropriate to reduce alcohol misuse among college students, whether counsellor based interventions or .computer delivered interventions. After an year's follow up on these interventions the effects shown on promotion of specific behaviours in individual interventions. This kind of interventions had promising effects on reducing drinking habits of students. **(Nancy et al 2007)**¹⁰⁷

Another study conducted on how societal norms changed regarding alcohol consumption from ancient India to recent times. Previously there were guidelines and rules that who should, when should and how should drink alcohol. It was occasional and ritualistic in ancient times and later drinking changed to every day for some or the other reason. **(Saxena S. 1999).**¹⁰⁸

2.8 AN OVERVIEW OF RESEARCH REVIEWED

There were very few Indian studies on alcohol use and college students. But in general there are many very useful studies to count on. The researcher carefully had chosen relevant and related studies for this work. There were many articles and books written from abroad on this particular area helped the researcher to identify the need for this study. From the above research review the researcher got ideas on evaluating the strength of the scientific evidence, identifying gaps in the present study, identifying central issues and finding solutions, identifying a theoretical or conceptual framework, and exploring which research methods have been used successfully. From the related reviews of literature helped the researcher a detailed and thoughtful work, the outcome of which can be a significant contribution to a particular body of knowledge.

The statement of the problem and methodology of the problem is presented in the succeeding chapter- III.

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